# University of Hawai'i at Mānoa

**Environmental Center**
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March 15, 1995
RP:0169

Ms. Rae M. Loui
Commission on Water Resource Management
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Loui:

Stream Channel Alteration Permit
Kahaluu Stream
Kahaluu, Oahu

The project involves lining approximately 200 feet of Kahuluu Stream's eroded banks with concrete grouted rip rap. The work, which is expected to take about 40 days to complete, will require excavation of approximately 160 cy of material and 255 cy of fill. To minimize impact on the stream, the work will be phased in 50-foot increments and make use of a 12 cy filter basin.

We reviewed this Stream Channel Alteration Permit (SCAP) with the help of James Parrish, Hawaii Cooperative Fishery Research Unit; and Paul Berkowitz of the Environmental Center.

General Comments

In general, this project appears environmentally benign; however since the project description is so brief, it is difficult to properly assess the impacts. Given the limited amount of data presented, we have only a few comments and questions.

First, it is unclear whether the stream surrounding the project site contains rip rap or has been channelized. Depending on the characteristics of the surrounding stream, some cumulative impact or erosion concerns may exist.

Second, the document does not present any information on the stream's aquatic life. According to the Commission on Water Resource Management's *Hawaii Stream Assessment*, Kahaluu Stream contains moderate aquatic resources, with *'o'opu nakea* and at least six other native species present. Since the Aquatic Resources Committee believes that this species of

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'o'opu may be declining, we have some concerns about the effects of this project on this species. Furthermore, as highlighted in the *Hawaii Stream Assessment*, the close proximity of Kahaluu Stream to a wetlands area and to Kaneohe Bay makes the project's potential impacts more critical.

Third, we believe that the provisions for minimizing damage during construction seem reasonable, although one reviewer suggested placing a silt curtain upstream of the rock filter to increase silt capture. Additionally the document fails to explain what is meant by the term "KA-2 Sediment Basin."

Finally, the document states that stream bank undercutting has threatened private homes and a Board of Water Supply 20-inch water main. Emergency repairs usually are a hallmark of incomplete attention to environmental or engineering contingencies during original project design. Given that streams naturally cut away their banks, why were these structures built so close to Kahuluu Stream in the first place? Are these properties located in an identified flood plain? Did the private owners comply with zoning regulations at the time of building? Were all the proper permitting procedures followed? How may emergency repair costs now being assumed by the taxpayers county-wide be appropriately allocated in the future to direct beneficiaries of the repairs?

Conclusion

In summary, placing 200 feet of rip rap along Kahaluu Stream does not seem like a major undertaking; however, this application does not discuss the project or the site in enough detail to really discern the environmental effects. In particular, we would have liked to see more information about the surrounding stream condition and the biota of the stream. If the threats to private property and the water main are real, then the best alternative seems to be to proceed with the project. Nonetheless, we believe the above issues ought to be considered before this emergency project continues further.

Thank you for the opportunity to review this Stream Channel Alteration Permit.

Sincerely,

John T. Harrison
Environmental Coordinator

cc: OEQC
Roger Fujioka
James Parrish
Paul Berkowitz